

Claims:

1. Apparatus for developing imaged lithographic printing plates having soluble areas of coating comprising conveying means for moving said plates across a substantially horizontal support structure, means for
5 applying developer solution to said imaged plates whereby said soluble areas of coating are dissolved in said developer solution to produce spent developer solution and developed plates, and means for removing said spent developer solution from said developed plates wherein said means for applying developer solution comprises:
 - 10 a. printhead means for jetting said developer solution onto said plates;
 - b. means for feeding said developer solution to said printhead means;
 - c. mounting means for mounting said printhead means
15 above said conveying means; and
 - d. control means for activating said printhead means to jet developer solution in response to the presence of a plate under said printhead means and for
20 deactivating said printhead means in response to the absence of a plate under said printhead means.
2. Apparatus as recited in claim 1, wherein said printhead means is stationary.
- 25 3. Apparatus as recited in claim 2 wherein the length of said printhead means is equivalent to or greater than the width of said plates.

4. Apparatus as recited in claim 2, wherein said printhead means comprises a plurality of discrete printheads in a linear arrangement.
- 5 5. Apparatus as recited in claim 2, wherein said printhead means comprises a plurality of discrete printheads in a staggered arrangement.
6. Apparatus as recited in claim 3, wherein said printhead
10 means has plurality of jet nozzles along its length.
7. Apparatus as recited in claim 6, wherein said jet nozzles can be selectively activated.
- 15 8. Apparatus as recited in claim 6, wherein said control means includes means for selectively activating said jet nozzles.
9. Apparatus as recited in claim 1 wherein said control means includes an end sensor adapted to sense the leading and trailing
20 ends of said plates.
10. Apparatus as recited in claim 9 wherein said end sensor is an optical sensor.
- 25 11. Apparatus as recited in claim 9 wherein said control means further includes side sensing means adapted to sense the sides of said plates.

12. Apparatus as recited in claim 11 wherein said side sensing means comprises a scanning optical sensor.

13. Apparatus as recited in claim 1 further including a reservoir for feeding developer solution to said printhead means.

14. Apparatus for developing imaged lithographic printing plates having soluble areas of coating comprising conveying means for moving said plates across a substantially horizontal support structure and means for applying developer solution onto said plates whereby said soluble areas of coating are dissolved wherein said means for applying developer solution comprises:

- a. printhead means for jetting said developer solution onto said plates;
- b. means for feeding said developer solution to said printhead means;
- c. mounting means for mounting said printhead means above said conveying means; and
- d. control means for activating said printhead means to jet developer solution in response to the presence of a plate under said printhead means and for deactivating said printhead means in response to the absence of a plate under said printhead means.

15. Apparatus as recited in claim 14 and further including means for removing said dissolved soluble areas of coating from said plates.

16. Apparatus as recited in claim 15 wherein said means for removing said dissolved soluble areas of coating comprises means for applying rinse water to said plates.

5 17. A method of applying a thin film of developer solution to lithographic printing plates having imaged coatings on a surface thereof comprising areas of coating insoluble in said developer solution and areas of coating soluble in said developer solution, said method comprising conveying said plates across a substantially horizontal
10 support structure and jetting a uniform layer of developer solution onto said imaged coatings with a jetting printhead to dissolve said soluble coating and produce a spent developer solution and developed plates and removing said spent developer solution from said developed plates and discharging said spent developer solution to waste.

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18. A method as recited in claim 17 further comprising the steps of sensing the leading ends of said plates being conveyed to activate said scanning and said jetting of said jetting printhead and sensing the trailing ends of said plates being conveyed to deactivate said scanning and said
20 jetting of said jetting printhead.

19. A method as recited in claim 18 and further comprising the step of sensing the sides of said plates being conveyed and thereby activating and deactivating said jetting of said jetting printhead.

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20. A method as recited in claim 17 wherein said jetting printhead is stationary.